



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,231	11/14/2003	David M. Callaghan	03AB157/ALBRP335US	2471
7590 Susan M. Donahue Rockwell Automation, 704-P IP Department 1201 South 2nd Street Milwaukee, WI 53204				
04/08/2008				
EXAMINER				
JEAN GILLES, JUDE				
ART UNIT		PAPER NUMBER		
2143				
MAIL DATE		DELIVERY MODE		
04/08/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/714,231

Applicant(s)

CALLAGHAN, DAVID M.

Examiner

JUDE J. JEAN GILLES

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/14/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This office action is responsive to the Reply filed on 12/12/2007.

Response to Amendment/Arguments

2. In the claims, Claims 1-27 are currently pending in the subject application and are presently under consideration. Claims 1 and 22 have been amended as shown on page 2-5 of the Reply. Claims 28 and 29 have been newly added. Claims 1-29 represent a method and apparatus for a "DYNAMIC BROWSER-BASED INDUSTRIAL AUTOMATION INTERFACE SYSTEM AND METHOD."

Applicant's arguments with respect to claims 1, 10, 17, and 22 have been carefully considered, but are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the existing ground of rejection as explained here below. Applicants' amendments to independent claims 1 and 22 are not properly made and as to perhaps place them in condition for allowance.

The dependent claims stand rejected as articulated in the Previous Office Action and all objections not addressed in Applicant's response are herein reiterated.

In response to Applicant's arguments, 37 CFR § 1.11(c) requires applicant to "clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must show the amendments avoid such references or objections."

Applicant's Request for Reconsideration filed on 12/12/2007 has been carefully considered but is not deemed fully persuasive. However, because there exists the

likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention:

Point A: Applicant contends that Applicant's claimed subject matter relates to industrial automation, and more particularly toward a system and method for communicating with automation devices utilizing an interactive human machine interface. To this end, independent claim 1 recites *a system for interacting with automation devices, comprising: a plurality of automation devices connected to a network, the automation devices supply automation data to the network," and an interface connected to the network including an interactive program and an execution engine for executing the program, wherein the interactive program and the execution engine are embedded and executed from within a browser and interact with the automation device data*. Maes does not disclose or suggest such novel aspect of the present invention.

As to point A, the Examiner respectfully disagrees with the Applicant. The rejection of claim 1 below evidenced that the prior art of record discloses the invention as claimed (see Maes; par. 0114; par. 0153, 0164, and 0174; see fig. 14a-b, engine 1420, and browser application 1421).

Point B: Applicant argues that Maes relates to system and method for implementing conversational protocols for distributed conversational networking architectures and applications and fails to teach or suggest the claimed invention. The Examiner acknowledges that the primary reference, Maes does not teach the claimed invention

and provides a secondary reference, Bonasia *et al.*, to compensate for the after mentioned deficiencies of Maes. The secondary reference, Bonasia *et al.*, given by Examiner, relates to a method for adding a device to an existing or new electrical automation or multimedia network and the device can be used by an ordinary user of network capable electric devices. A functional profile of LonWorks networks includes a Home profile. The Home profile employs an automated explicit type messaging for all devices intended for use in a home environment; and this reference does not teach the claimed invention.

As to pint B, the Examiner again disagrees with Applicant's characterization of the claims rejections. Mainly, the rejection of claim 5 provides the elements of Bonasia that are combined with Maes, as well as the reason to combine and proper motivation for doing so.

Examiner notes that no new matter has been added and that the new claims are supported by the application as filed. However, applicant has failed in presenting claims and drawings that delineate the contours of this invention as compared to the cited prior art. Applicant has failed to clearly point out patentable novelty in view of the state of the art disclosed by the references cited that would overcome the 102(e) anticipation and the 103(a) rejections applied against the claims, the rejection is therefore sustained.

Claim Rejections - 35 USC § 102

Art Unit: 2154

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-4, and 10-16** are rejected under 35 U.S.C. 102(e) as being anticipated by Maes, U.S. Pub. No. 20020184373.

Regarding **claim 1-4, and 10-16** Maes discloses:

1. A system for interacting with automation devices, comprising:

a plurality of automation devices *connected* to a network, the automation devices supply automation data to the network (*par. 0014*); and

an interface connected to the network including an interactive program and an execution engine for executing the program, wherein the interactive program and the execution engine are embedded and executed from within a browser and interact with the automation device data (*par. 0153, 0164, and 0174; see fig. 14a-b, engine 1420, and browser application 1421*).

2. The system of claim 1, further comprising a data storage medium for centrally storing data relating to the plurality of automation devices (*par. 0106, and 0164; fig. 16, engine server 1602*).

Art Unit: 2154

3. The system of claim 2, wherein the browser retrieves data utilizing the interactive program from the data storage medium (*par. 0164, note server 1602 using speech engine programs to process stored data interactively with the clients*).

4. The system of claim 2, wherein the browser writes data utilizing the interactive program to the data storage medium (*par. 0106, par. 0164*).

10. A human machine interface apparatus for operating in an industrial facility comprising:

a data store (*fig. 17, item 1701 is the client and 1707, the storage database located in the client interface*);

one or more automation devices communicatively coupled to the data store via a network, wherein the automation devices store data in the data store (*par. 0172; fig. 17, and 18*); and

a browser accesses data concerning the one or more automation devices over the network and presenting the data to a user in a rich manner incorporating a plurality of multimedia effects (*par. 0153, 0164, and 0174*).

11. The apparatus of claim 10, the multimedia effects being incorporated in the browser via an embedded interactive program (*fig. 18*).

12. The apparatus of claim 11, wherein the interactive program is a flash program (*par.*

Art Unit: 2154

0051).

13. The apparatus of claim 11, wherein the interactive program is executed by a plugin associated with the browser (fig. 18, also see par. 0206).

14. The apparatus of claim 13, wherein the plugin is a flash player (par. 0051, 0206).

15. The apparatus of claim 10, wherein one of the multimedia effects is an interactive graph (fig. 21, and 23).

16. The apparatus of claim 10, wherein one of the effects is a depiction of an automation device with regions highlighted in real-time upon the occurrence of an error to indicate the device region associated with the error (par. 0240; note the use of annotation which can be used inherently to highlight the regions of a device when error takes place).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 5-9, 17-27 and 28-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Maes in view of Bonasia et al (hereinafter Bonasia) US Patent No 6,332,127 B1.

Regarding **claim 5**, Maes teaches the invention substantially as claimed. Maes discloses the system for interaction with automation devices as described in claim 1, but fails to distinctly claim the interactive program comprising bindings that bind program variables to device data such that a change in device data is immediately reflected in the program variable bound thereto.

In an analogous art, Bonasia shows the technique of using a bidding application variables to device data by propagating data changes among a plurality of devices. Bonasia discloses a system in which "...*The binding process begins with the devices sending a Home Profile message to each other with the option to bind all application variables, otherwise only the mandatory variables are bound (step 166). Next, the devices update their respective network variable address tables in accordance with the optional Home Profile received (step 168). If an object does not have Home Profile*

explicit messaging, then the method defaults to binding only the mandatory variables..." [see *Bonasia*, column 18, lines 43-56].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Bonasia's teachings of a bidding process with the teachings of Maes, for the purpose of "...facilitating interoperability between a number of linked automated devices, thereby providing flexibility and additional functionality in controlling networks, (see *Bonasia*, column 1, lines 26-32). By this rationale **claim 5** is rejected.

6. The system of claim 5, wherein the interactive program comprises functions that operate on program variables to produce information desired by a user (see *Bonasia*, column 18, lines 43-56). The same motivation used to reject claim 5 is also valid for this claim. By this rationale, claim 6 is rejected.

7. The system of claim 6, wherein the interactive program comprises a presentation component that produces a multimedia presentation that is displayed on a display device (see *Maes*; *fig. 18*).

8. The system of claim 7, wherein the multimedia presentation provides data with respect to one or more automation devices updates the data in real-time (see *Maes*; *par. 0014*).

9. The system of claim 7 wherein the multimedia presentation provides a plurality mechanisms for transmitting data to one or more automation devices (*see Maes; par. 0014*).

17. A method for interacting with automation devices comprising:
binding program variables to automation device data using an interactive program and specifying a multimedia presentation format for interaction by a user [*see Bonasia, column 18, lines 43-56*]; embedding the interactive program into a browser; and utilizing the browser and an associated execution engine to execute the interactive program (*see Maes; par. 0153, 0164, and 0174; see fig. 14a, engine 1420, and browser application 1421*).

18. The method of claim 17, wherein the device data is stored in a centralized data store accessible via a network (*see Maes; par. 0172; fig. 17, and 18*).

19. The method of claim 17, wherein the interactive program is a flash program (*see Maes; par. 0051*).

20. The method of claim 19, wherein the execution engine is a flash player. (*see Maes; par. 0051; the addition the Examiner takes Official notice that it is well known in the art that a flash player to run a flash program*).

21. An article of manufacturing comprising a computer usable medium having computer readable instructions stored thereon to perform the method of claim 17(*see Maes*; par. 0313).

22. A method for interacting with automation device data comprising:

binding program variables to automation device data using an interactive program

and specifying a multimedia presentation format for interaction by a user [*see Bonasia, column 18, lines 43-56*];

embedding the interactive program into a browser application; receiving a request for automation device information from within a browser application (*see Maes*; par. 0014); retrieving the requested automation device information from a data source utilizing an execution engine associated with the browser application (*see Maes*; par. 0153, 0164, and 0174); and updating the browser with the requested automation device information (*see Maes*; par. 0153, 0164, and 0174; *see fig. 14a, engine 1420, and browser application 1421*).

23. The method of claim 22, wherein the request for information is generated by positioning a cursor over an image (*see Maes*; positioning a cursor to request for information of inherent to art of device of automation and specifically with the use of an interface browser).

Art Unit: 2154

24. The method of claim 22, wherein the data source is a web page (*see Maes*; par. 0168-0170).

25. The method of claim 22, wherein information is retrieved from a device controller (*see Maes*; par. 0255, 0265).

26. The method of claim 25, wherein the information is control data (*see Maes*; par. 0255, 0265).

27. An article of manufacturing comprising a computer usable medium having computer readable instructions stored thereon to perform the method of claim 25 (*see Maes*; par. 0313).

28. (New) The system of claim 15, wherein a user can click and drag points on the graph to effectuate changes in a production schedule (*see Bonasia*, col. 5, lines 1-16).

29. (New) The system of claim 7, wherein the multimedia presentation is an interactive map such that a user can point and click to start and stop devices, increase or decrease power, or view information about each device (*see Maes*, par. 0171, and 0245; also *see Bonasia*, col. 5, lines 1-15).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3201.

Art Unit: 2154

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 305-0800.

Jude Jean-Gilles

Patent Examiner

Art Unit 2143

April 1, 2008

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2154